## **Abstract**

An optical cross-connect (OCX), which is designed for the switching of so-called Optical Channels of different multiplex levels with respectively defined bit rates, has a number of input/output ports (IO1, IO2, IO3) which are respectively adapted to transmit and receive communication signals of a particular multiplex level. The cross-connect furthermore has a space switching matrix (S) which is adapted to switch communication signals of the lowest multiplex level. Input/output ports (IO1) of the lowest multiplex level are connected directly to the switching matrix, and input/output ports (IO2, IO3) of the higher multiplex levels are respectively connected to the switching matrix via a multiplexer (MUX1, MUX2) which is adapted to multiplex a number of communication signals of the lowest multiplex level that are received from the switching matrix (S), so as to form a communication signal of the corresponding higher multiplex level, and to demultiplex a communication signal of the higher multiplex level that is received from the respective input/output port (IO2, IO3), so as to form a number of communication signals of the lowest multiplex level, and forward these individually to the switching matrix (S).